THE SNAKE GENUS *AMASTRIDIUM* IN OAXACA, MEXICO

Hobart M. Smith[1]

In their excellent review of the snake genus *Amastridium*, Wilson and Meyer (1969) reported specimens from but four states of Mexico: Nuevo León, Tamaulipas, Veracruz, and Chiapas. A specimen (Univ. Colo. Museum 39895) taken by Thomas MacDougall, 17 March 1969, at Las Muellas, Palomares, Juchitán, Oaxaca, bridges the gap between Atlantic-slope specimens northward from the Isthmus of Tehuantepec and the Pacific-slope individuals from southern Chiapas.

The specimen is a small female, 225 mm total length, 56 mm tail length, with loreals 1-1, supralabials 7-7, infralabials 9-9, maxillary teeth 15 + 2 (enlarged rear teeth not grooved), postoculars 2-2, temporals 1-2, ventrals 162, caudals 80, anal divided, no scale pits except on nape. The color is almost uniformly dark above and below, with a large pinkish spot on the nape extending forward into the parietal area on each side.

In all these respects the specimen is typical of the northern populations characterized by Wilson and Meyer. Their conclusion that the genus is monotypic, however, is open to question. Their evidence that populations from Nicaragua to Panama are closely related to those occurring northward from Honduras, and that they do not differ in some respects (*e.g.*, grooving of maxillary teeth) previously suggested, is completely convincing and irrefutable. There is likewise an apparent cline in the number of ventrals northward from Honduras. Nevertheless there is a hiatus of considerable magnitude in the number of ventrals between populations northward from Honduras, including the male reported by McCoy (1971:136) from Middlesex, British Honduras (males, 146-158; females, 144-170) and those to the south (males, 119-129; females, 126-134). The data reveal a hiatus in character-states also between Honduras (males, 146; females, 144) and more northern localities (males, 150-158; females, 152-170), but it is of lesser magnitude, involves fewer specimens, and is therefore likely an artifact of inadequate sampling and is unsupported by correlated distinctions. The Honduras-Nicaragua hiatus *is* correlated with another distinction (loreal present to the north, absent to the south) and is supported by sufficient series to lend considerable confidence in the reality of the indicated differences. Moreover, a range of 32-35 in ventral counts in a single taxon with so few ventrals is exceptional. A geographic segregation in character-variation of systematic magnitude does exist in the data now available, yielding a 100 percent separation of the compared populations on the basis of two independent criteria. Taxonomic

[1]Department of Biology, University of Colorado, Boulder, Colorado 80302.

recognition of this fact is mandatory even if reliance is to be placed upon anticipated evidence yet to come.

To be sure, a great deal of taxonomy among poorly known populations is guesswork, for incontrovertible proof is provided only by large samples from closely adjacent but widespread localities. Even then, taxonomic conclusions may be moot, since even full data may on occasion reasonably be interpreted differently by different experts. Yet it is a systematist's duty to make the best educated guess he can of the populational relationships and characteristics that exist in nature, however inadequate the data.

In the present case, one may justify a guess that populations in the Honduras-Nicaragua hiatus either do not exist or are reproductively isolated, in either case requiring recognition of two species; or one may justify assumption of continuity and intergradation of the two populations, requiring recognition of two subspecies delimited by a strong, doubly augmented step in clinal variation in at least two characters. It seems inconceivable to conjecture that further data would justify the conclusion that in no character will a strong clinal step, or hiatus, prove to exist; yet that conjecture would have to be made to justify recognition of only one taxon in *Amastridium*.

Accordingly, the data now known require recognition of both *veliferum* and *sapperi;* the guess is here made that they will prove to interbreed in a zone of contact, resulting in an intergradation of differential characteristics. It is therefore suggested that the members of this genus be designated as *Amastridium veliferum veliferum* Cope, 1861, and *Amastridium veliferum sapperi* (Werner, 1903). To the latter subspecies belongs the specimen here recorded from Oaxaca.

Dr. Wilson kindly provided data on an additional specimen of *Amastridium*, here referred to as *A. v. sapperi*, which he encountered after his review of the genus appeared. It is Univ. Arizona 27036, 2 mi (3 km) SE Sontecomapán, 14 mi (22 km) NE Catemaco, Veracruz, taken 23 Aug. 1967; exasperatingly it is another female; ventrals 154, anal divided, caudals 72; 17 scalerows throughout; loreals 1-1, supralabials 7-7, infralabials 9-9, oculars and temporals 1-2; total length 450 mm, tail 106 mm. The locality is blanketed by previous records.

Literature Cited

McCoy, C. J. 1971. The snake fauna of Middlesex, British Honduras. J. Herpet., 4:135-140, fig. 1 (1970).

Wilson, L. D., and J. R. Meyer. 1969. A review of the colubrid snake genus *Amastridium*. Bull. Southern California Acad. Sci., 68(3):145-159, figs. 1-3.